

Section 1. PRODUCT DESCRIPTION

CONSTRUCTION FLANGE HEAD SCREW, TX – WKCP

Construction screw WKCP is made of yellow, blue (to order) zinc-plated low carbon steel or coated with SQ ceramic coating (to order). Screws are used for connecting structural wood elements including solid wood, glued laminated timber, X-Lam and LVL timber panels and wood-based panels. Screws have flange head with TX drive and a special cutting point suitable for connections in wooden structures.

Features and advantages of screws:

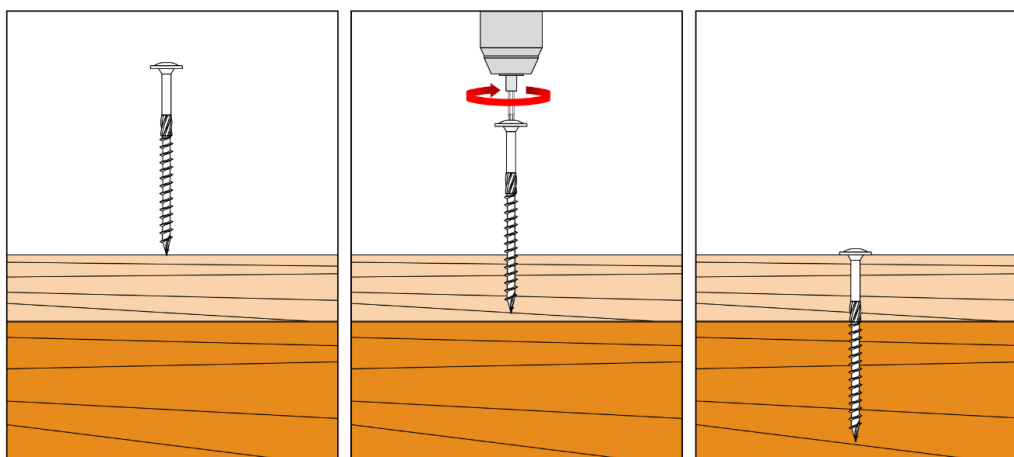
- wax coating – reduced torque, faster and easier installation
- flange head – increases the bearing area and provides tight connection as well as resistance to head pull-through.
- TX drive – guarantees optimum torque transfer as the screw advances
- shank ribs – reduce driving torque by reaming the hole
- serrated thread – cuts wood structural fibres as the screw advances
- special cutting point – makes the start of installation easier, without prior drilling
- length of screws up to 400mm



Screws hold European Technical Assessment: ETA-18/0817

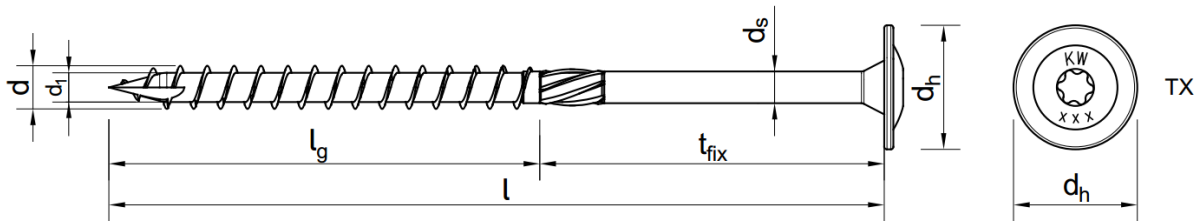
Section 2. METHOD OF INSTALLATION

1. Original screws delivered by the manufacturer can be used only
2. Before installation select adequate length of screws depending on thickness of elements to be fastened and minimum anchorage depth
3. The fastened wooden elements should be defect-free (no knots, cracks, colourations, rots, structure and shape defects, mechanical damages) as any defects reduce their strength
4. Screws should be installed using screw gun and bit suitable for TX drive
5. Screws should be driven directly in wooden substrate without prior drilling



PRODUCT DATA SHEET – WKCP

Section 3. TECHNICAL DATA



TECHNICAL PARAMETERS				
Parameter	Unit	Value		
Thread outer diameter	d [mm]	6	8	10
Thread inner diameter	d ₁ [mm]	3,9	5,4	6,4
Smooth part diameter	d _s [mm]	4,3	5,8	7
Head diameter	d _h [mm]	14	20	25
Head area	A [mm ²]	154	314	491
Length range	l [mm]	50-300	80-400	100-400
Drive type	-	TX-30	TX-40	TX-40
Screw material	-	carbon steel		
Corrosion protection	galvanized	≥ 5 μm		
	ceramic coating SQ	≥ 8 μm		
Corrosivity category	galvanized	C1/C2		
	ceramic coating SQ	C3		
Substrate material	wood	≥ C24		
European Technical Assessment	-	ETA-18/0817		

STRENGTH PARAMETERS				
Parameter	Unit	WKCP ø6	WKCP ø8	WKCP ø10
Material characteristic yield strength	M _{y,k} [Nm]	10,0	25,0	43,0
Characteristic pull-out resistance	f _{ax,k,90} [N/mm ²]	12,0	12,0	11,0
Characteristic resistance to head pull-through	f _{head,k} [N/mm ²]	9,4	9,4	9,4
Characteristic resistance for tension	f _{tens,k} [kN]	13,0	25,0	36,0
Characteristic torsional strength	f _{tor,k} [Nm]	10,0	27,0	45,0

SELECTION TABLE						
Product marking	Screw diameter	Screw length	Working thread length	Usable length	Drive type	Number of pieces in a box
	d [mm]	l [mm]	l _g [mm]	t _{fix} [mm]	[-]	
WKCP-06050	6,0	50	30	20	TX-30	100
WKCP-06060	6,0	60	35	25	TX-30	100
WKCP-06070	6,0	70	40	30	TX-30	100
WKCP-06080	6,0	80	50	30	TX-30	100
WKCP-06090	6,0	90	50	40	TX-30	50
WKCP-06100	6,0	100	50	50	TX-30	50
WKCP-06110	6,0	110	60	50	TX-30	50
WKCP-06120	6,0	120	60	60	TX-30	50
WKCP-06130	6,0	130	60	70	TX-30	50
WKCP-06140	6,0	140	70	70	TX-30	50
WKCP-06160	6,0	160	70	90	TX-30	50
WKCP-06180	6,0	180	70	110	TX-30	50
WKCP-06200	6,0	200	70	130	TX-30	50
WKCP-06220	6,0	220	70	150	TX-30	50
WKCP-06240	6,0	240	70	170	TX-30	50
WKCP-06260	6,0	260	70	190	TX-30	50
WKCP-06280	6,0	280	70	210	TX-30	50

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WKCP-06300	6,0	300	70	230	TX-30	50
WKCP-08080	8,0	80	50	30	TX-40	50
WKCP-08090	8,0	90	50	40	TX-40	50
WKCP-08100	8,0	100	50	50	TX-40	50
WKCP-08120	8,0	120	60	60	TX-40	50
WKCP-08140	8,0	140	60	80	TX-40	50
WKCP-08160	8,0	160	80	80	TX-40	50
WKCP-08180	8,0	180	80	100	TX-40	50
WKCP-08200	8,0	200	80	120	TX-40	50
WKCP-08220	8,0	220	80	140	TX-40	50
WKCP-08240	8,0	240	80	160	TX-40	50
WKCP-08260	8,0	260	80	180	TX-40	50
WKCP-08280	8,0	280	80	200	TX-40	50
WKCP-08300	8,0	300	80	220	TX-40	50
WKCP-08320	8,0	320	80	240	TX-40	50
WKCP-08340	8,0	340	80	260	TX-40	50
WKCP-08360	8,0	360	80	280	TX-40	50
WKCP-08380	8,0	380	80	300	TX-40	50
WKCP-08400	8,0	400	80	320	TX-40	50
WKCP-10100	10,0	100	50	50	TX-40	50
WKCP-10120	10,0	120	60	60	TX-40	50
WKCP-10140	10,0	140	60	80	TX-40	50
WKCP-10160	10,0	160	80	80	TX-40	50
WKCP-10180	10,0	180	80	100	TX-40	50
WKCP-10200	10,0	200	80	120	TX-40	50
WKCP-10220	10,0	220	80	140	TX-40	25
WKCP-10240	10,0	240	80	160	TX-40	25
WKCP-10260	10,0	260	80	180	TX-40	25
WKCP-10280	10,0	280	80	200	TX-40	25
WKCP-10300	10,0	300	80	220	TX-40	25
WKCP-10320	10,0	320	80	240	TX-40	25
WKCP-10340	10,0	340	80	260	TX-40	25
WKCP-10360	10,0	360	80	280	TX-40	25
WKCP-10380	10,0	380	80	300	TX-40	25
WKCP-10400	10,0	400	80	320	TX-40	25

Section 4. REMARKS

1. All previous versions of this Product Data Sheet shall cease to be valid
2. Data given in this Product Data Sheet is in accordance with current knowledge and published in good faith. KLIMAS Sp. z o.o. is not responsible for correctness and quality of the fixing if recommendations regarding method of use and installation are not followed.